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ABSTRACT

A model curriculum design is summarized for the integration of career education into Grades K through 9. Included are: (1) a descriptive overview of the curriculum design, (2) lists of members of the three review teams and the advisory panel, and (3) figures and tables depicting the scope, objectives, and concepts covered by the curriculum, and estimation of the content covered by grade level, and codes for objectives covered in the cognitive and affective domains across curriculum areas. Graphs, figures, charts, and listings are used to present most of the information in the document. (SN)

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SUMMARY INFORMATION:

THE AIR-BAVTE
CAREER EDUCATION CURRICULUM
FOR GRADES K THROUGH 9

June 1, 1973

VT 021 018

P.O. BOX 1113. PALO ALTO, CALIFORNIA 94302 (LOCATION: 1791 ARASTRADERO ROAD) ☐ TEL. (415) 328-3550

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Figure 1

LEVELS OF OBJECTIVES SPECIFICITY

Descriptive Terms	Hierarchical Order of Objectives	Types of Probable Users
• Curriculum	Mathematics	Superintendents and Boards of Education
• Program	Arithmetic	
• Strand	Whole Number Operations	Principals and Building Administrators
• Area	Addition	
• Topic	Addition of fractions	Curriculum Planners and Coordinators
	Addition of simple fractions	
• Concept	Addition of simple fractions with common denominators	
• Instructional Objective	Addition of two simple fractions with common denominators	Teachers
• Behavioral Objective	Addition of two simple fractions with common denominators when the operation is word form and the fraction expression is in numerical form	Test Developers
• Test (Performance) Objective	From a list of five fractions a student will be able to identify one which is the sum of one-fifth plus three-fifths.	

Figure 2

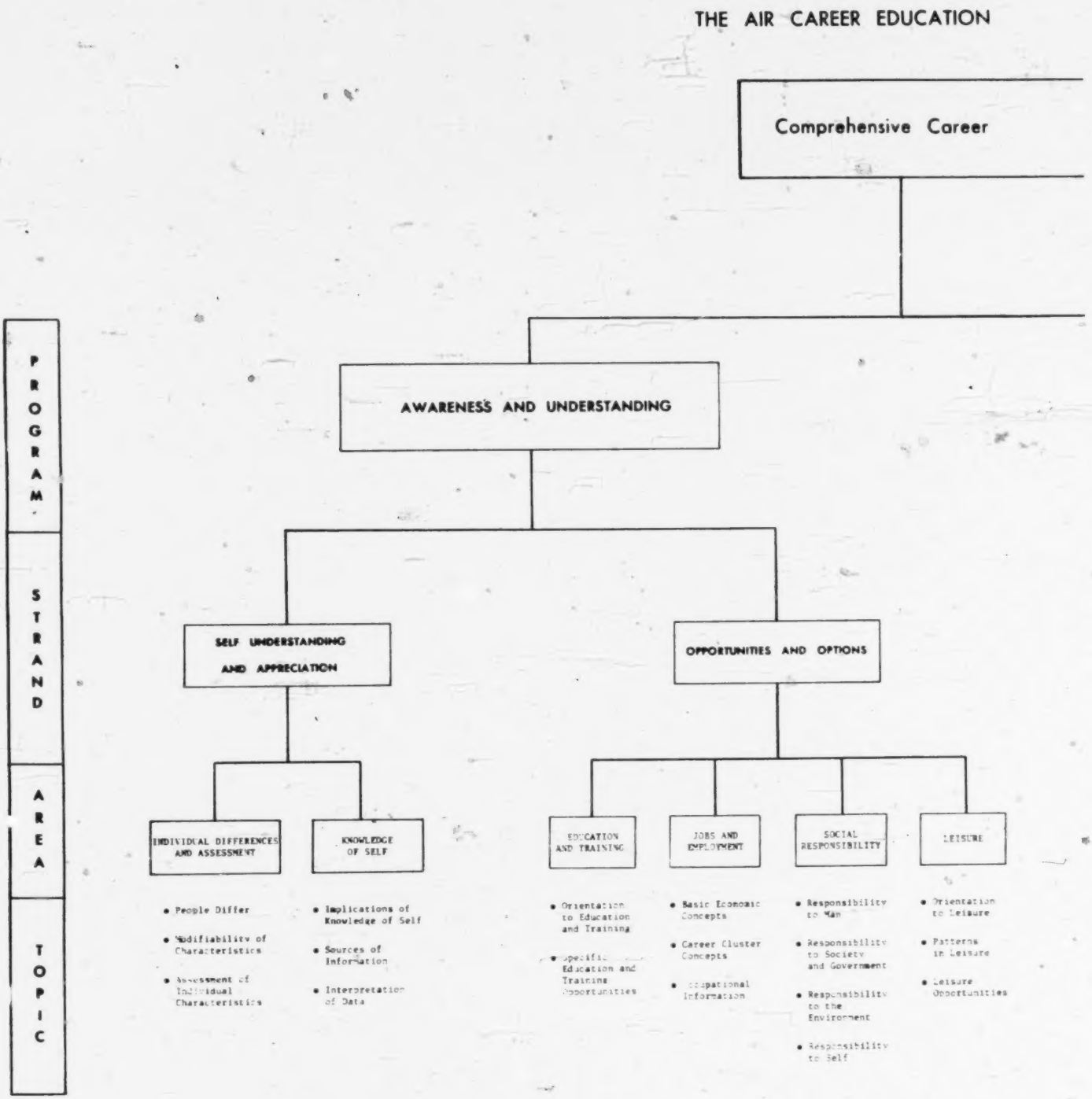
THE AIR CAREER EDUCATION
Comprehensive Career
PROGRAM
STRAND
AREA
TOPIC
AWARENESS AND UNDERSTANDING
SELF UNDERSTANDING AND APPRECIATION
OPPORTUNITIES AND OPTIONS
INDIVIDUAL DIFFERENCES AND ASSESSMENT
KNOWLEDGE OF SELF
EDUCATION AND TRAINING
JOBS AND EMPLOYMENT
SOCIAL RESPONSIBILITY
LEISURE
• People Differ
• Modifiability of Characteristics
• Assessment of Individual Characteristics
• Implications of Knowledge of Self
• Sources of Information
• Interpretation of Data
• Orientation to Education and Training
• Specific Education and Training Opportunities
• Basic Economic Concepts
• Career Cluster Concepts
• Occupational Information
• Responsibility to Man
• Responsibility to Society and Government
• Responsibility to the Environment
• Responsibility to Self
• Orientation to Leisure
• Patterns in Leisure
• Leisure Opportunities

Figure 2

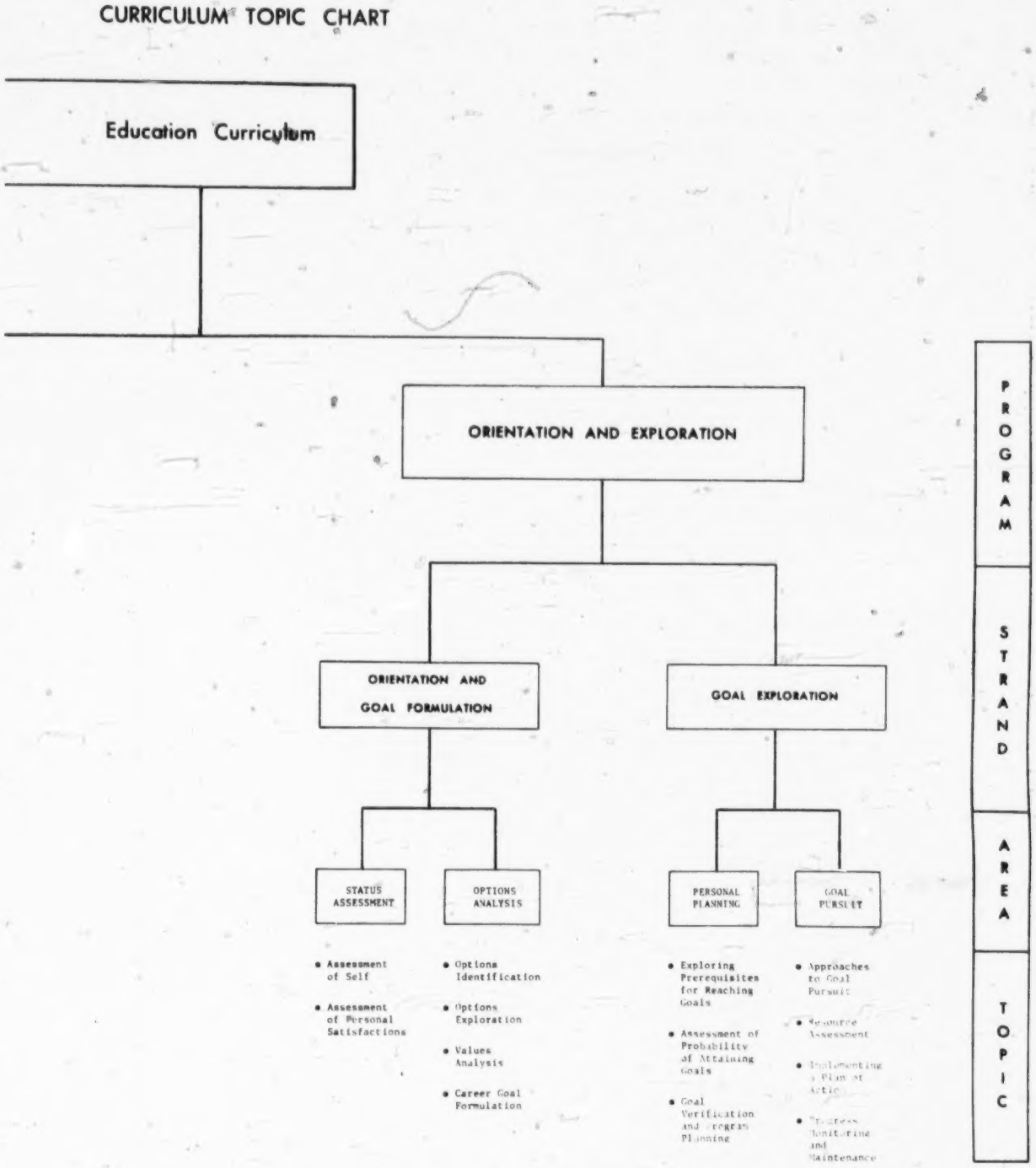
CURRICULUM TOPIC CHART
Education Curriculum
ORIENTATION AND EXPLORATION
ORIENTATION AND GOAL FORMULATION
GOAL EXPLORATION
STATUS ASSESSMENT
OPTIONS ANALYSIS
PERSONAL PLANNING
GOAL PURSUIT
• Assessment of Self
• Assesement of Personal Satisfactions
• Options Identification
• Options Exploration
• Values Analysis
• Career Goal Formulation
• Exploring Prerequisites for Reaching Goals
• Assessment of Probability of Attaining Goals
• Goal Verification and Program Planning
• Approaches to Goal Pursuit
• Resource Assessment
• Implementing a Plan of Action
• Progress Monitoring and Maintenance
PROGRAM
STRAND
AREA
TOPIC

Figure 3

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand I: Self Understanding and Appreciation

Individual Differences and Assessment

People Differ

- Differences in physical skills
- Differences in interests and attitudes
- Differences in social skills
- Differences in values
- Differences in academic skills
- Differences in interpersonal skills
- Differences in emotional reactions
- Differences in personal goals
- Reasons for and patterns of differences

Modifiability of Characteristics

- Developmental/biological changes
- Changes resulting from experiences
- Changes resulting from conscious effort
- Modification/development of academic abilities
- Relative modifiability of characteristics
- Modification of interpersonal skills
- Changes in emotional reactivity

Assessment of Individual Characteristics

- Assessment of physical skills
- Reliability of measures
- Assessment of interests
- Assessment of attitudes and values
- Assessment of academic skills and achievement
- Interpretation of simple test results
- Validity of measures
- Purposes and limitations of assessment
- Methods of assessment
- Technical concepts useful in understanding tests and test results

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand I: Self Understanding and Appreciation

Knowledge of Self

Implications of Knowledge of Self

- Building self-confidence
- Expanding self-awareness
- Formulating identity/self concept
- Identifying areas for development
- Facilitating personalized planning and decision-making
- Maximizing chances of success of plans

Sources of Information

- People's activities
- Opinions of self and others
- Self-exploration
- Academic tests
- Guidance tests and records
- Feedback from others

Interpretation of Data

- Recognizing emotions and attitudes in others
- Recognizing emotions and attitudes in self
- Appraisal of motor skills
- Appraisal of academic skills
- Recognizing effects of behavior on others
- Assessment of classroom academic performance
- Identification of personal values
- Analysis of interests
- Analysis of emotional behavior
- Implications of test data
- Clarification of values

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand II: Opportunities and Options

Education and Training

Orientation to Education and Training

- Trends in education and training
- Individual differences in education and training needs
- Types of education and training opportunities
- Sources of education and training

Specific Education and Training Opportunities

- Vocational/technical training, apprenticeships
- On-the-job/in-service training
- Higher education
- Continuing/adult education

Social Responsibility

Responsibility to Man

- Value of helping others
- Safety and health of others
- Consequences of own actions for others
- Respect for others
- Value and dignity of the individual

Responsibility to Society and Government

- Loyalty to friends and country
- Existence and necessity of rules and laws
- Importance of compliance with rules and laws
- Volunteer service in community programs
- Obligation to protest unjust rules and laws
- Value of personal rights and freedoms
- Citizen participation in a democracy
- Interrelation of one person's rights and those of others

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand II: Opportunities and Options

Social Responsibility (continued)

Responsibility to the Environment

- Appreciation of nature
- Balance of nature
- Fragile character of the ecological system
- Implications of societal changes for the environment
- Importance and need for preserving natural settings
- Man's obligation to future generations
- Effects of individual action

Responsibility to Self

- Responsibility for tasks
- Responsibility for actions
- Family responsibilities
- Care for self
- Personal integrity
- Acceptance of responsibility

Leisure

Orientation to Leisure

- Leisure as rest and/or recreation
- Leisure as personal development and/or avocational pursuit
- Individual differences in leisure activities

Patterns in Leisure

- Temporal patterns of leisure activities
- Geographical patterns of leisure activities
- Personal patterns of leisure activities
- Expansion of time for leisure
- Implications of expansion of time for leisure

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand II: Opportunities and Options

Leisure (continued)

Leisure Opportunities

- Types of leisure activities: rest and recreation
- Types of leisure activities: personal development and avocational pursuit
- Leisure resources
- Factors influencing selection of leisure activities
- Costs and benefits of leisure activities

Jobs and Employment

Basic Economic Concepts

- Types of productivity
- Monetary exchange system
- Labor market
- Factors affecting income
- Labor migration and mobility
- Monetary and non-monetary benefits
- Occupational supply and demand
- Functional utility of income

Career Cluster Concepts

- Functions of clusters
- How to form clusters
- Reasons for clustering
- Introduction to twelve career clusters
- Comparisons among twelve career clusters
- Comparisons within twelve career clusters
- Rationale for twelve career clusters

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand II: Opportunities and Options

Jobs and Employment (continued)

Occupational Information

- Nature of tasks
- Products of work
- Social contribution
- Work conditions
- Entry requirements
- Salary and advancement
- Job outlook/security
- Implications for life style

Strand III: Orientation and Goal Formulation

Status Assessment

Assessment of Self

- Assessment of self in relation to leisure options
- Assessment of self in relation to employment options
- Assessment of self in relation to education and training options
- Assessment of self in relation to roles and responsibilities
- Assessment of self in relation to prerequisites for specific goals
- Personal characteristics to consider in goal formulation
- Implications of changes in personal characteristics

Assessment of Personal Satisfactions

- Satisfying and dissatisfying activities
- Satisfying and dissatisfying situations
- Identification of conflict between expectations of self and expectations of others for self
- Components of satisfying personal life style
- Resolution of conflict between expectations of self and expectations of others for self

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand III: Orientation and Goal Formulation (Continued)

Options Analysis

Options Identification

- Options identification in relation to specific interests
- Options identification in relation to specific physical abilities
- Options identification in relation to cognitive abilities
- Options identification in relation to patterns of personal characteristics
- Value of considering many options
- Options identification in relation to work and social styles
- Alternative combinations of options fitting given personal characteristics and patterns

Options Exploration

- Sources of information/influence regarding potential options
- Kinds of information to seek regarding specific options
- Methods and sources for obtaining information about specific options
- Evaluation of alternative information sources

Values Analysis

- Advantages (benefits) and disadvantages (costs) of options
- Implications of options for personal satisfactions
- Relative cost/benefit analyses of alternative options
- Personal determination of criteria for evaluating options
- Resolution of conflict among options

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand III: Orientation and Goal Formulation

Options Analysis (continued)

Career Goal Formulation

- Career goal formulation in relation to general interests and physical abilities
- Relation of career goal formulation to sense of agency
- Multiplicity of career goals
- Career goal formulation in relation to general cognitive skills
- Career goal formulation in relation to personal satisfactions and values
- Data-based goal formulation
- Tentative formulation of career goals
- Resolution of conflict among goals and aspirations

Strand IV: Goal Exploration

Personal Planning

Exploring Prerequisites for Reaching Goals

- Planning to attain goals
- Determination of general prerequisites for attaining given goals
- Identification of means to attain given goals
- Recognition of costs to attain goals

Assessment of Probability of Attaining Goals

- Identification of personal situational factors influencing goal attainment
- Recognition of personal attributes necessary to attain given goals
- Assessment of implications of pursuing goals for one's personal life
- Assessment of likelihood of attaining given goals

Figure 3 (continued)

CAREER EDUCATION CURRICULUM TOPICS AND CONCEPTS

Strand IV: Goal Exploration

Personal Planning (continued)

Goal Verification and Program Planning

- Identification of how a person can begin working toward career goals while still in school
- Development of contingency plans for attaining goals
- Determination of which goals require immediate action, which do not, and why
- Determination of what specific actions will be required to attain given goals
- Preparation of plan(s) for accomplishing necessary tasks to attain goal(s)

Goal Pursuit

Approaches to Goal Pursuit

- A programmatic approach to goal pursuit
- Evaluation of alternative approaches to pursuing goals

Resource Assessment

- Identification of resource needs
- Identification of available resources
- Allocation of resources

Implementing a Plan of Action

- Determining priorities
- Allocating effort

Progress Monitoring and Maintenance

- Progress assessment
- Activity adjustment
- Termination/redeployment of effort

Figure 4

CURRICULUM CONCEPTS SCOPE AND SEQUENCE CHART

STRAND I: SELF UNDERSTANDING AND APPRECIATION

AREA	TOPIC	K - 1	2 - 3	4 - 6	7 - 9
Individual Differences and Assessment	People Differ	Differences in physical skills	Differences in interests and attitudes Differences in social skills	Differences in values Differences in academic skills	Differences in physical skills Differences in [illegible] Differences in personal goals Reasons for and patterns of differences
	Modifiability of Characteristics	Developmental/biological changes	Changes resulting from experiences	Changes resulting from conscious effort Modification/development of academic abilities	Relative modifiability of characteristics Modification of interpersonal skills Changes in emotional reactivity
	Assessment of Individual Characteristics	Assessment of physical skills Reliability of measures	Assessment of interests	Assessment of attitudes and values Assessment of academic skills and achievement Interpretation of simple test results Validity of measures	Purposes and limitations of assessment Methods of assessment Technical concepts useful in understanding tests and test results
Knowledge of Self	Implications of Knowledge of Self	Building self-confidence	Expanding self-awareness	Formulating identity/self concept Identifying areas for development	Facilitating career-related planning and decision-making Maximizing chances of success of plans
	Sources of Information	People's activities	Opinions of self and others	Self-exploration Academic tests	Guidance tests and records Feedback from others
	Interpretation of Data	Recognizing emotions and attitudes in others	Recognizing emotions and attitudes in self Appraisal of motor skills Appraisal of academic skills	Recognizing effects of behavior on others Assessment of classroom academic performance Identification of personal values Analysis of interests	Analysis of emotional behavior Implications of test data Clarification of values

Figure 4 (continued)

CURRICULUM CONCEPTS SCOPE AND SEQUENCE CHART

STRAND II: OPPORTUNITIES AND OPTIONS

AREA	TOPIC	K - 1	2 - 3	4 - 6	7 - 9
Education and Training	Orientation to Education and Training			Trends in education and training Individual differences in education and training needs	Types of education and training opportunities Sources of education and training
	Specific Education and Training Opportunities				Vocational/technical training, apprenticeships On-the-job/in-service training Higher education Continuing/adult education
Social Responsibility	Responsibility to Man	Value of helping others	Safety and health of others	Consequences of own actions for others	Respect for others Value and dignity of the individual
	Responsibility to Society and Government	Loyalty to friends and country	Existence and necessity of rules and laws Importance of compliance with rules and laws	Volunteer service in community programs Obligation to protest unjust rules and laws Value of personal rights and freedoms	Citizen participation in a democracy Interrelation of one person's rights and those of others
	Responsibility to the Environment	Appreciation of nature	Balance of nature	Fragile character of the ecological system Implications of societal changes for the environment	Importance and need for preserving natural settings Man's obligation to future generations Effects of individual action
	Responsibility to Self	Responsibility for tasks	Responsibility for actions	Family responsibilities Care for self	Personal integrity Acceptance of responsibility
Leisure	Orientation to Leisure		Leisure as rest and/or recreation	Leisure as personal development and/or avocational pursuit Individual differences in leisure activities	
	Patterns in Leisure		Temporal patterns of leisure activities Geographical patterns of leisure activities	Personal patterns of leisure activities Expansion of time for leisure	Implications of expansion of time for leisure
	Leisure Opportunities		Types of leisure activities: rest and recreation	Types of leisure activities: personal development and avocational pursuit Leisure resources	Factors influencing selection of leisure activities Costs and benefits of leisure activities

Figure 4 (continued)

CURRICULUM CONCEPTS SCOPE AND SEQUENCE CHART

STRAND II (continued): OPPORTUNITIES AND OPTIONS

AREA	TOPIC	K - 1	2 - 3	4 - 6	7 - 9
Jobs and Employment	Basic Economic Concepts		Types of productivity Monetary exchange system	Labor market Factors affecting income Labor migration and mobility Monetary and non-monetary benefits Occupational supply and demand	Functional utility of income
	Career Cluster Concepts		Functions of clusters	How to form clusters Reasons for clustering Introduction to twelve career clusters	Comparisons among twelve career clusters Comparisons within twelve career clusters Rationale for twelve career clusters
	Occupational Information	Dentist, Doctor, Nurse	Architect, Meteorologist	Chemist, Civil Engineer, Electrical Engineer, Mathematician, Mechanical Engineer, Physicist	
				Dietitian, Doctor, Nurse, Pharmacist, Physical Therapist	
			Sanitation Technician, Surveyor	Computer Programmer, Dental Hygienist, Draftsman, Medical Laboratory Assistant, Photographer/ Photographic Laboratory Worker	
		Pilot	Accountant, Advertising Worker	Manufacturing Inspector, Marketing Research Worker, Personnel Worker, Purchasing Agent	
			Salesman	Hotel/Motel Manager, Salesman	
		Cashier, Telephone Operator	Office Machine Operator, Postal Clerk, Railroad Clerk, Secretary, Shipping and Receiving Clerk	Airline Steward/Stewardess, Airline Ticket Clerk, Bank Clerk/ Teller, Bookkeeper, Cashier, Computer Operator, Hotel Worker, Secretary, Telephone Operator	
			Auto Mechanic, Electrician, Machinist, Telephone Repairman and Craftsman, TV/Radio Repairman, Welder	Airplane Mechanic, Appliance Repairman, Auto Mechanic, Compositor, Pressman, Related Press Activities Worker	
			Bricklayer, Carpenter, Cement Mason, Construction Laborer, Painter, Plasterer, Plumber, Roofer	Carpenter, Iron Worker, Production Painter	
		Barber, Bus Driver, Fireman, Gas Station Attendant, Locomotive Engineer, Mailman, Policeman	Chef/Cook, Cosmetologist, Forest Ranger, Recreation Worker, Taxi Driver, Truck Driver, Waiter/Waitress	Assembly Line Worker, Chef/Cook, Cosmetologist, Maid, Policeman, Practical Nurse, Railroad Brakeman, Truck Driver, Waiter/Waitress	
		Clergyman	Elementary School Teacher, School Counselor	Elementary School Teacher, High School Teacher, Home Economist, Social Worker	
			Librarian	College Professor, Economist, Lawyer, Newspaper Reporter, Psychologist	
			Actor/Actress, Dancer, Music Teacher/Musician, TV/Radio Announcer	Commercial Artist, Singing Teacher/ Singer	

Figure 4 (continued)

CURRICULUM CONCEPTS SCOPE AND SEQUENCE CHART

STRAND III: ORIENTATION AND GOAL FORMULATION

AREA	TOPIC	K - 1	2 - 3	4 - 6	7 - 9
Status Assessment	Assessment of Self		Assessment of self in relation to leisure options	Assessment of self in relation to employment options Assessment of self in relation to education and training options	Assessment of self in relation to roles and responsibilities Assessment of self in relation to prerequisites for specific goals Personal characteristics to consider in goal formulation Implications of changes in personal characteristics
	Assessment of Personal Satisfactions		Satisfying and dissatisfying activities	Satisfying and dissatisfying situations Identification of conflict between expectations of self and expectations of others for self	Components of satisfying personal life style Resolution of conflict between expectations of self and expectations of others for self
Options Analysis	Options Identification		Options identification in relation to specific interests Options identification in relation to specific physical abilities	Options identification in relation to cognitive abilities Options identification in relation to patterns of personal characteristics Value of considering many options	Options identification in relation to work and social styles Alternative combinations of options fitting given personal characteristics and patterns
	Options Exploration			Sources of information/influence regarding potential options	Kinds of information to seek regarding specific options Methods and sources for obtaining information about specific options Evaluation of alternative information sources
	Values Analysis			Advantages (benefits) and disadvantages (costs) of options Implications of options for personal satisfactions	Relative cost/benefit analyses of alternative options Personal determination of cr..eria for evaluating options Resolution of conflict among options
	Career Goal Formulation		Career goal formulation in relation to general interests and physical abilities	Relation of career goal formulation to sense of agency Multiplicity of career goals Career goal formulation in relation to general cognitive skills Career goal formulation in relation to personal satisfactions and values	Data-based goal formulation Tentative formulation of career goals Resolution of conflict among goals and aspirations

Figure 4 (continued)

CURRICULUM CONCEPTS SCOPE AND SEQUENCE CHART

STRAND IV: GOAL EXPLORATION

AREA	TOPIC	K - 1	2 - 3	4 - 6	7 - 9
Personal Planning	Exploring Prerequisites for Reaching Goals		Planning to attain goals	Determination of general prerequisites for attaining given goals	Identification of means to attain given goals Recognition of costs to attain goals
	Assessment of Feasibility of Attaining Goals			Identification of personal situational factors influencing goal attainment	Recognition of personal attributes necessary to attain given goals Assessment of implications of pursuing goals for one's personal life Assessment of likelihood of attaining given goals
	Goal Verification and Program Planning			Identification of how a person can begin working toward career goals while still in school Development of contingency plans for attaining goals	Determination of which goals require immediate action, which do not, and why Determination of what specific actions will be required to attain given goals Preparation of plan(s) for accomplishing necessary tasks to attain goal(s)
Goal Pursuit	Approaches to Goal Pursuit			A programmatic approach to goal pursuit	Evaluation of alternative approaches to pursuing goals
	Resource Assessment				Identification of resource needs Identification of available resources Allocation of resources
	Implementing a Plan of Action				Determining priorities Allocating effort
	Progress Monitoring and Maintenance				Progress assessment Activity adjustment Termination/redeployment of effort

Figure 5

OCCUPATIONAL CLUSTERS OF THE AIR CAREER EDUCATION CURRICULUM DEVELOPMENT PROJECT *

CAREER FAMILIES	CAREER CLUSTERS		OCCUPATIONS **
	Title	Description	
SCIENTIFIC - TECHNICAL	ENGINEERING, PHYSICAL SCIENCE, MATHEMATICS, ARCHITECTURE	Workers are involved in the research and application of the physical and mathematical sciences. Includes teaching, design, and development in areas concerned with inorganic matter, energy, physical measurement and relationships, production, and the like.	Architect Chemist Civil Engineer Electrical Engineer Mathematician Mechanical Engineer Meteorologist Physicist
	MEDICAL AND BIOLOGICAL SCIENCES	Activities involved with living organisms and life processes. Provide services, explore problems, and research questions relating to all aspects of life, such as health and disease of all living things, including plants and animals.	Dentist Dietitian Doctor Nurse Pharmacist Physical Therapist
	TECHNICAL	Includes those workers who support physical and biological scientists. May be involved in design, development, production, maintenance, testing, or research. Most often work with equipment in laboratories, computer centers, design groups, or in other technical settings.	Computer Programmer Dental Hygienist Draftsman Medical Laboratory Assistant Photographer and Photographic Laboratory Worker Sanitarian Surveyor
BUSINESS	BUSINESS ADMINISTRATION	Includes occupations involved in the production, financial, and management aspects of commerce, banking, industry, and the military. Workers in this area typically determine policy, monitor progress, or provide other services which contribute to the on-going operation of an organization.	Accountant Advertising Worker Manufacturing Inspector Market Research Worker Personnel Worker Pilot Purchasing Agent
	BUSINESS, SALES	Workers in this area make possible the transactions between manufacturers of products and customers who need and use those products through trade activities of various types. May be directly involved in selling or in the supervision of sellers.	Hotel/Motel Manager Salesman
	BUSINESS - CLERICAL	Assist business and industry with record keeping, communications, shipping and receiving merchandise, and operating equipment, such as office machines.	Airline Steward, Stewardess Airline Ticket Clerk Bank Clerk/Teller Bookkeeper Cashier Computer Operator Hotel Worker Office Machine Operator Postal Clerk Railroad Clerk Secretary Shipping and Receiving Clerk Telephone Operator

* Clusters are defined by the similarity of the ability profiles of the individuals entering occupations in each cluster.

** These 100 occupations account for 76.5% of the estimated job openings listed in the Occupational Outlook Quarterly, Spring, 1970; the OOQ list accounts for 65.6% of all estimated annual job openings, 1968-1980, as projected by the Bureau of Labor Statistics.

Figure 5 (continued)

OCCUPATIONAL CLUSTERS OF THE AIR CAREER EDUCATION CURRICULUM DEVELOPMENT PROJECT * (continued)

CAREER FAMILIES	CAREER CLUSTERS		OCCUPATIONS **
	Title	Description	
TRADES	CONSTRUCTION TRADES	Workers in this area are involved in all phases of building, repair, remodeling, or maintenance of buildings, bridges, roadways, and other structures.	Bricklayer Carpenter Cement Mason Construction Laborer Iron Worker Painter Plasterer Plumber Production Painter Roofer
	MECHANICS, INDUSTRIAL TRADES	Includes skilled craftsmen who use tools and instruments to build, operate, and maintain machines and other types of equipment.	Airplane Mechanic Appliance Repairman Auto Mechanic Compositor Electrician Machinist Pressman Related Press Activities Worker Telephone Repairman and Craftsman TV and Radio Repairman Welder
PROFESSIONAL SERVICES	GENERAL, COMMUNITY SERVICE, PUBLIC SERVICE	Workers in this area provide services to people in the community, such as policing the streets, putting out fires, making food and clothing, assisting in health care, transporting goods, and providing personal services.	Assembly Line Worker Barber Bus Driver Chef, Cook Cosmetologist Fireman Forest Ranger Locomotive Engineer Maid Mailman Practical Nurse Policeman Railroad Brakeman Recreation Worker Service Station Attendant Taxi Driver Truck Driver Waiter, Waitress
	GENERAL TEACHING AND SOCIAL SERVICE	Occupations in this group generally involve helping others through instruction, guidance, or in other ways facilitating the maintenance of people's social, physical, and intellectual well-being.	Clergyman Elementary School Teacher High School Teacher Home Economist School Counselor Social Worker
	HUMANITIES, LAW, SOCIAL AND BEHAVIORAL SCIENCES	Workers in this area are primarily interested in literature and philosophy, how human beings relate to one another, to the law, and to their social and economic environments.	College Professor Economist Lawyer Librarian Newspaper Reporter Psychologist
	FINE ARTS, PERFORMING ARTS	Includes workers who are involved with the arts, such as the theater, music, painting, sculpting, crafts, or dancing.	Actor, Actress Commercial Artist Dancer Music Teacher, Musician Singing Teacher, Singer TV and Radio Announcer

AIR'S "CURRICULUM DESIGN AND INSTRUCTIONAL OBJECTIVES CATALOG"

A DESCRIPTION

After the basic design of the curriculum was conceived and organized, the heart of the curriculum, that is, the instructional objectives, needed development. These objectives were developed by a cadre of master teachers selected from a pool of volunteers by school district supervisors. After participating in a workshop on career education, curriculum design, and the specification of behavioral objectives, the teachers joined the project staff on a full-time basis for the initial drafting of the pool of instructional objectives.

The development of objectives was monitored closely by project staff, reviewed by responsible curriculum personnel for the respective school districts, and then reviewed, edited, and modified as necessary by project staff to achieve appropriate balance. These objectives were furthur organized and sequenced, not only developmentally, but also according to the types of skills required for the successive mastery of objectives. The hierarchical taxonomies of Bloom and Krathwohl provided furthur classification of objectives into cognitive or affective domains, as summarized in Figures 8 through 13 following.

These objectives were then submitted for review by four different panels of consultants representing a wide variety of specialties before finally being included in the catalog of 1,981 instructional objectives.

Figure 6

RELATIVE INSTRUCTIONAL EMPHASIS

Curriculum			Number of Concepts/Objectives By Grade Level(1)				
Program	**Strand**	**Area**	K-1	2-3	4-6	7-9	Total
Awareness and Understanding	Self Understanding and Appreciation	Individual Differences and Assessment	4/23	4/30	8/47	10/52	26/152
		Knowledge of Self	3/16	5/20	8/39	7/36	23/111
	Opportunities and Options	Education and Training			2/8	6/51	8/59
		Jobs and Employment*	8/102	11**/353	16**/594	4/22	23/1071
		Social Responsibility	4/19	5/28	8/45	9/48	26/140
		Leisure		4/25	6/36	3/20	13/81
		PROGRAM TOTALS	19/160	29/456	48/769	39/229	119/1614
Orientation and Exploration	Orientation and Goal Formulation	Status Assessment		2/13	4/30	6/40	12/83
		Options Analysis		3/21	10/56	11/77	24/154
	Goal Exploration	Personal Planning		1/7	4/20	8/51	13/78
		Goal Pursuit			1/5	9/47	10/52
		PROGRAM TOTALS		6/41	19/111	34/215	59/367
		CURRICULUM TOTALS	19/160	35/497	67/880	73/444	178/1981

(1) The numerator indicates the number of concepts; the denominator indicates the number of objectives.

* 8 of these concepts pertain to occupational information and are replicated across 100 occupations: thus, the ratio of concepts to objectives appears to be exceptional.

** 8 concepts replicated from earlier level

Figure 7

THE AIR CEC PROJECT

RELATIVE CONTENT COVERAGE OF CONCEPTS BY GRADE LEVEL

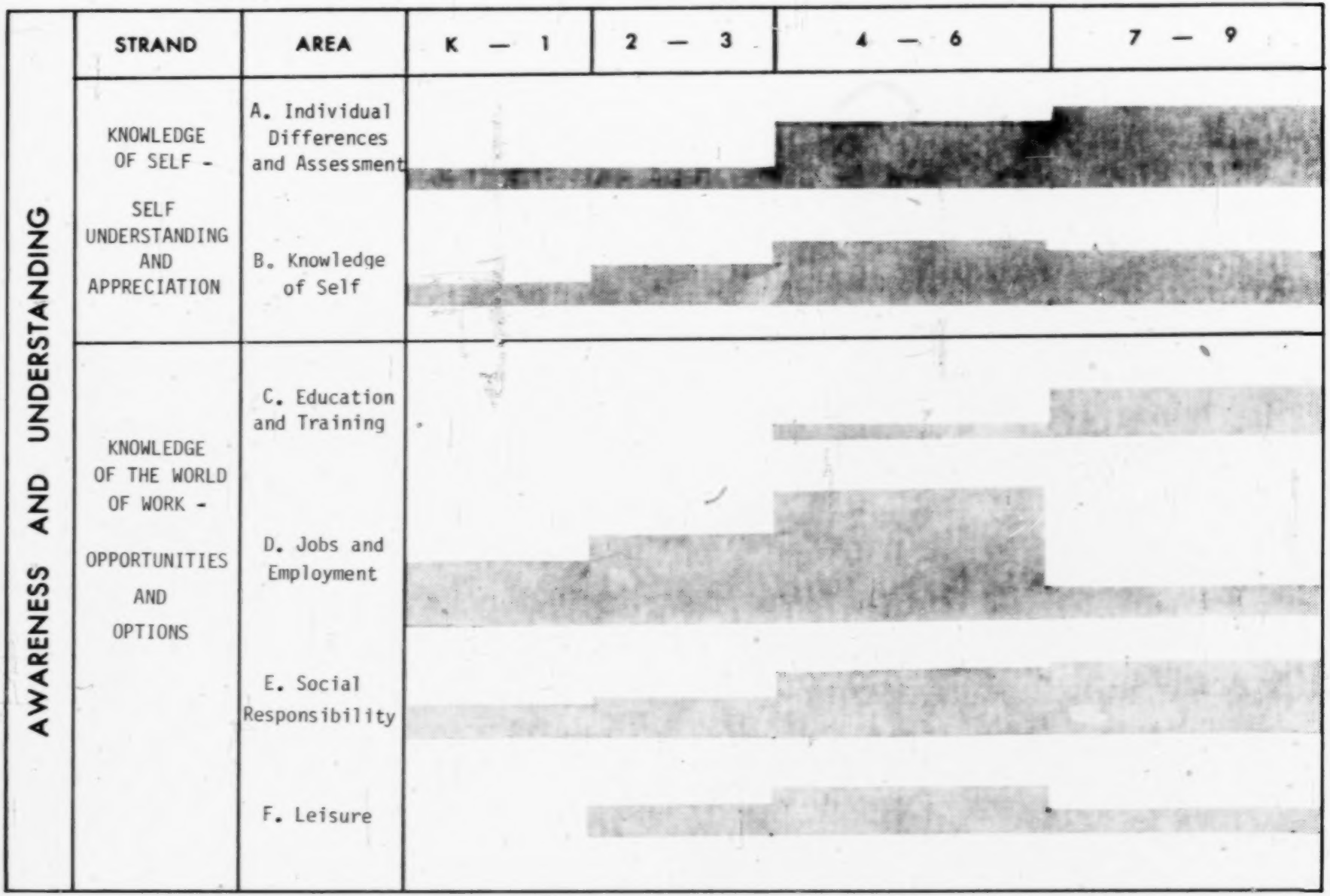

Figure 7 (continued)

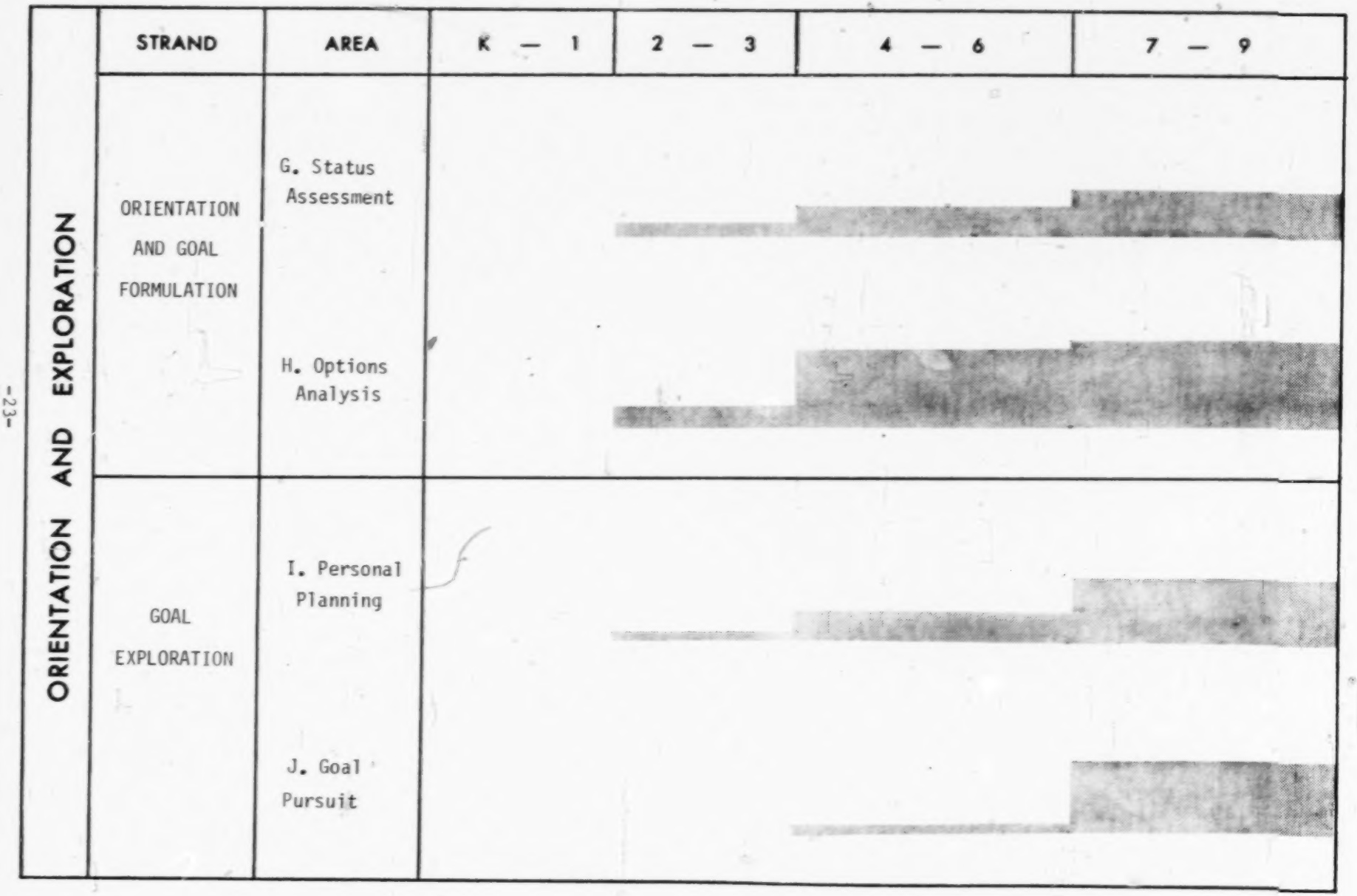

Figure 8

PER CENT DISTRIBUTION* OF CODES FOR OBJECTIVES IN THE COGNITIVE DOMAIN, BY TAXONOMIC LEVEL, ACROSS CURRICULUM AREAS

		CURRICULUM AREAS										
	TAXONOMIC LEVEL	Individual Differences and Assessment	Knowledge of Self	Education and Training	Jobs and Employment	Social Responsibility	Leisure	Status Assessment	Options Analysis	Personal Planning	Goal Pursuit	TOTAL %
COGNITIVE DOMAIN	I	2	2	5	74	2	5	2	4	2	<1	100%
	II	11	8	2	45	9	4	5	9	4	3	100%
	III	3	2	2	62	10	5	5	4	4	2	100%
	IV	13	6	5	48	6	6	4	6	3	2	100%
	V	6	0	0	9	0	3	7	43	13	19	100%
	VI	13	10	0	56	6	0	4	7	3	1	100%

* Totals may vary slightly from 100% due to rounding error.

Figure 9

PER CENT DISTRIBUTION* OF CODES FOR OBJECTIVES IN THE AFFECTIVE DOMAIN, BY TAXONOMIC LEVEL, ACROSS CURRICULUM AREAS

		CURRICULUM AREAS										
	TAXONOMIC LEVEL	Individual Differences and Assessment	Knowledge of Self	Education and Training	Jobs and Employment	Social Responsibility	Leisure	Status Assessment	Options Analysis	Personal Planning	Goal Pursuit	TOTAL %
AFFECTIVE DOMAIN	I	0	0	0	100	0	0	0	0	0	0	100%
	II	2	1	0	64	15	0	1	10	1	5	100%
	III	0	6	0	13	42	19	3	0	6	10	100%

* Totals may vary slightly from 100% due to rounding error.

Figure 10

PER CENT DISTRIBUTION* OF CODES FOR COGNITIVE DOMAIN OBJECTIVES IN CURRICULUM AREAS ACROSS TAXONOMIC LEVELS

	COGNITIVE DOMAIN — Taxonomic Levels						
CURRICULUM AREAS	I	II	III	IV	V	VI	TOTAL %
Individual Differences and Assessment	6	61	3	22	3	6	100%
Knowledge of Self	12	65	3	14	0	6	100%
Education and Training	44	29	7	20	0	0	100%
Jobs and Employment	38	37	10	12	<1	4	100%
Social Responsibility	10	61	13	13	0	3	100%
Leisure	33	38	10	18	3	0	100%
Status Assessment	16	52	10	12	6	4	100%
Options Analysis	14	48	5	10	19	3	100%
Personal Planning	16	50	9	11	12	3	100%
Goal Pursuit	8	48	6	10	26	2	100%

* Totals may vary slightly from 100% due to rounding error.

Figure 11

PER CENT DISTRIBUTION OF CODES FOR AFFECTIVE DOMAIN OBJECTIVES IN CURRICULUM AREAS ACROSS TAXONOMIC LEVELS

	AFFECTIVE DOMAIN — Taxonomic Levels			
CURRICULUM AREAS	I	II	III	TOTAL %
Individual Differences and Assessment	0	100	0	100%
Knowledge of Self	0	33	67	100%
Education and Training	0	0	0	-
Jobs and Employment	14	80	6	100%
Social Responsibility	0	48	52	100%
Leisure	0	0	100	100%
Status Assessment	0	50	50	100%
Options Analysis	0	100	0	100%
Personal Planning	0	33	67	100%
Goal Pursuit	0	57	43	100%

Figure 12

PER CENT DISTRIBUTION OF ALL OBJECTIVES CODES BY DOMAIN AND TAXONOMIC LEVEL

COGNITIVE							AFFECTIVE				ACTIVITY
Total	I	II	III	IV	V	VI	Total	I	II	III	Total
91	25	40	8	12	3	3	6	<1	4	1	3

Figure 13

PER CENT DISTRIBUTION* OF CODES FOR OBJECTIVES IN EACH CURRICULUM AREA ACROSS DOMAINS

CURRICULUM AREAS	DOMAINS: Cognitive	Affective	Activity	TOTAL %
Individual Differences and Assessment	99	1	0	100%
Knowledge of Self	97	3	0	100%
Education and Training	100	0	0	100%
Jobs and Employment	89	6	6	100%
Social Responsibility	83	16	<1	100%
Leisure	93	7	0	100%
Status Assessment	98	2	0	100%
Options Analysis	95	5	0	100%
Personal Planning	95	4	1	100%
Goal Pursuit	88	12	0	100%

* Totals may vary slightly from 100% due to rounding error.

Figure 14

AD HOC CURRICULUM REVIEW TEAM

Group 1

Mary Lou Baldra	Executive Director Palo Alto Educators Association National Educational Association
Kirke Comstock	Mayor, City of Palo Alto and Manager, Aircraft Engineering, United Air Lines
Carl Fisher	Chairman, Business Division Foothill College
Harry A. Harrison, Jr.	President, Harrison Construction Co. Member, California Advisory Council on Vocational Education
Edward Hastings	Executive Director American Conservatory Theater
Jim Haynes	Manager Economic Education Department Greater San Francisco Chamber of Commerce
Garth Hull	Educational Programs Officer Ames Research Center National Aeronautics and Space Administration
Edmond Mantani	Assistant Director Career Placement Center Stanford University
Betty Schallenberger	Executive Secretary Woman's Auxiliary to California Medical Association and Coordinator, Health Manpower Program

Figure 14 (continued)

AD HOC CURRICULUM REVIEW TEAM

Group 2

Lorraine S. Hansen	Department of Counseling and Student Personnel Psychology University of Minnesota
Nadine Lambert	School of Education University of California at Berkeley
Gene Medinnus	Department of Psychology California State University, San Jose
John Michaelis	School of Education University of California at Berkeley
Glenn Ohlson	Department of Special Education California State University, San Francisco
Joan S. Suppes	Psychology Department California State University, Hayward

Group 3

Mary Covello	Principal Braly Elementary School Santa Clara Unified School District
Carl Glissmeyer	Principal George Mayne Elementary School (Alviso) (Title I school) Santa Clara Unified School District
Robert F. Haller	Business Education Teacher Aptos High School Pajaro Valley Unified School District
Bill Larsen	Elementary Counselor Santa Clara Unified School District
David L. Peterman	Vocational Counselor Aptos High School Pajaro Volley Unified School District
Deborah Purvis	Home Economics Teacher Harbor High School Santa Cruz City Schools

Figure 14 (continued)

AD HOC CURRICULUM REVIEW TEAM

Special appreciation is also due the following individuals for their critical comments on selected portions of the occupational information objectives.

Ardys Bloomquist	Computer Operator
John Claudy	Computer Programmer
Gary Errecalde	Hair Stylist
Jean Ewings	Assembly Line Manufacturing
Harlin Halstead	Park Ranger
Hampton Hoge	Service Station Manager
Dennis Horton	Printshop Pressman
Velma G. Horton	Telephone Operator
Mary Kennedy	Waitress
Dorothy Lechuga	Bookkeeper
Dorothy McBride	Housekeeping Service
Laura C. Newmark	Librarian
Leo E. Peart	Municipal Police Department
Elmer Poppen	Mailman
Janet B. Sablinsky	Secretary
Catherine C. Ward	Restaurant Manager

Figure 15

NATIONAL ADVISORY PANEL

Dr. Ralph Tyler, Chairman

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Mr. Charles Woodruff	Vice President Pacific Telephone Company 2 North Second Street San Jose, CA 95113
Dr. Rex Fortune	State Department of Education Tentatively scheduled to serve as Dr. Riles' alternate.